



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/552,170	12/11/2006	Reinhold Roy	2003P00559WOUS	2022
46726 7590 07/23/2010 BSH HOME APPLIANCES CORPORATION INTELLECTUAL PROPERTY DEPARTMENT 100 BOSCH BOULEVARD NEW BERN, NC 28562				
EXAMINER MILLER, SAMANTHA A				
ART UNIT		PAPER NUMBER		
3749				
NOTIFICATION DATE		DELIVERY MODE		
07/23/2010		ELECTRONIC		

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

NBN-IntelProp@bshg.com

# Office Action Summary

**Application No.**

10/552,170

**Applicant(s)**

ROY, REINHOLD

**Examiner**

SAMANTHA A. MILLER

**Art Unit**

3749

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 11 October 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 16-31 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 16-31 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 11 October 2005 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/GS-08)
- 4) ☐ Interview Summary (PTO-413)
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_
- Paper No(s)/Mail Date 7/13/06 10/11/05

## **DETAILED ACTION**

### **DRAWINGS**

New corrected drawings in compliance with 37 CFR 1.121(d) are required in this application because the lines are uneven and it is hard to see the details. Applicant is advised to employ the services of a competent patent draftsman outside the Office, as the U.S. Patent and Trademark Office no longer prepares new drawings. The corrected drawings are required in reply to the Office action to avoid abandonment of the application. The requirement for corrected drawings will not be held in abeyance.

### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –  
(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

Claims 16-21, 23, 28 are rejected under 35 U.S.C. 102(a) as being anticipated by SOEHOLM (2004/0185770).

SOEHOLM teaches:

16. A room (122); a cooking device (104, being a heating device para.0026) in said room, a fan (106) arranged in said room (Fig.1); a pressure difference detection device (128, 130) for detecting the pressure difference (pressure difference, ) between the inside pressure (air pressure inside the mechanical room, para.0038) in said room and the outside pressure (the atmosphere pressure, para.0038) in the area outside said

room; and a control device (124) for controlling the air conveying capacity of the fume extraction device depending on the detected pressure difference (para.0034-0035).

17. A fan (122) for extracting the fume-laden air from a room (102) containing a cooking device (104, being a heating device) and conveying the extracted air to an area outside said room (Fig.1); a pressure difference detection device (128, 130) (para.0038) for detecting the pressure difference (126) between the inside pressure (pressure inside room 102, para.0038) in said room and the outside pressure (the atmosphere pressure, para.0038) in said area outside said room; and a control device (124) for controlling the air conveying capacity of said fan depending on the detected pressure difference (para.0035).

18. The pressure difference detection device having an inside pressure sensor (128) and an outside pressure sensor (130) and a comparator device (in 124) for comparing the detected inside pressure and the detected outside pressure (para.0038).

19. The pressure difference detection device (126) connected to said room via a first sensor line (to 128, shown in Fig.1) and connected to said area outside said room (to 130) by means of a second sensor line (shown in Fig.1).

20. The pressure difference detection device (126) arranged in at least one of said room at the fume extraction device (104 to 122), said area outside said room (130) or partly in said room and partly in said area outside said room (Fig.1).

21. The pressure difference detection device includes a membrane (the roof) which is connected on one side by means of a first sensor line (126 to 128) to said room

and is connected on the other side by means of a second sensor line (126 to 130) to said area outside said room (Fig.1).

23. A duct (112 and 118) provided for guiding the fume-laden air into said area outside said room and said second sensor line (126 to 130) is laid at least one of along or in said duct from said room into said area outside said room (126 is connected to or along duct 112 and 118) (Fig.1).

Regarding claim 28, refer to the rejection of claims 16-21 and 23.

### **Claim Rejections - 35 USC § 103**

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claim 22 is rejected under 35 U.S.C. 103(a) as being unpatentable over SOEHOLM in view of POTTER (4,552,059).

SOEHOLM teaches the invention above, however SOEHOLM does not teach a sensor line is a hose line.

POTTER teaches:

22. At least one of said first and said second sensor line (26) is a hose line (col.7 ll.59-63).

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the exhaust hood of SOEHOLM in view of the hose line of POTTER in order to use a monometer as a pressure sensor for cost efficiency.

Claims 24-27 and 29-31 are rejected under 35 U.S.C. 103(a) as being unpatentable over SOEHOLM in view of being a design choice.

SOEHOLM further teaches:

24. The control device (124) controls said fan (122) such that at least one of said inside pressure with respect to the outside pressure does not fall below a pre-determined pressure difference threshold (para.0036), said fan is switched off if said inside pressure with respect to said outside pressure falls below a pre-determined pressure difference threshold (para.0035-0036) and that said fan is switched on if said inside pressure with respect to said outside pressure increases above a pre-determined pressure difference threshold (para.0035-0036).

26. A warning signal (warning or alarm signal on the display devices 204, para.0058) issuing device is provided which issues a warning signal if said inside pressure falls below a pressure difference threshold (para.0058).

27. The output warning signal is at least one of an audible warning signal preferably in the form of an interrupted warning tone, and a visual signal (being on a display device, 204, para.0058) preferably in the form of a flashing red light and a visual signal in the form of a display "open window" or a display "ventilate room".

Regarding claims 29-31, refer to the rejection of claims 24-27.

SOEHOLM teaches the invention above, however SOEHOLM does not teach a pre-determined pressure difference threshold of 4 Pascal.

Regarding the pre-determined pressure difference threshold (Pd) of preferably substantially about 4 Pascal, since the applicant has failed to establish any criticality or synergistic results which are derived from the recited configurations, these limitations are considered a matter of obvious design choice. Thus, the applicant's design configurations would have been an obvious improvement to one of ordinary skill in the art with regard to the apparatus disclosed in SOEHOLM.

Claim 25 is rejected under 35 U.S.C. 103(a) as being unpatentable over SOEHOLM in view of being a design choice in further view of MORRIS (5,697,939).

SOEHOLM teaches the invention above, however SOEHOLM does not teach a control device that controls a fan in a control loop.

MORRIS teaches:

25. The control device controls said fan in a control loop (col.7 ll.2-6).

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the exhaust hood of SOEHOLM in view of the control loop of MORRIS in order to take place of a human fume hood operator (MORRIS, col.7 ll.2-6).

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Samantha A. Miller whose telephone number is 571-272-9967. The examiner can normally be reached on Monday - Thursday 8:00 - 4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Steve McAllister can be reached on 571-272-6785. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Samantha Miller  
Examiner  
Art Unit 3749  
7/15/2010

/Steven B. McAllister/  
Supervisory Patent Examiner, Art Unit 3749